



Drought Information Statement for Kansas

Current Status, Impacts, and Outlook [Beta Test 2023]

Issued By: Wichita's National Weather Service

Contact information: w-ict.webmaster@noaa.gov





Current Drought Conditions - Kansas

Latest Kansas Drought Monitor Map

Drought Intensity and Extent

D4 Exceptional Drought includes small portions of east-central and southeast Kansas.

D3 Extreme Drought includes large portions of central and eastern Kansas.

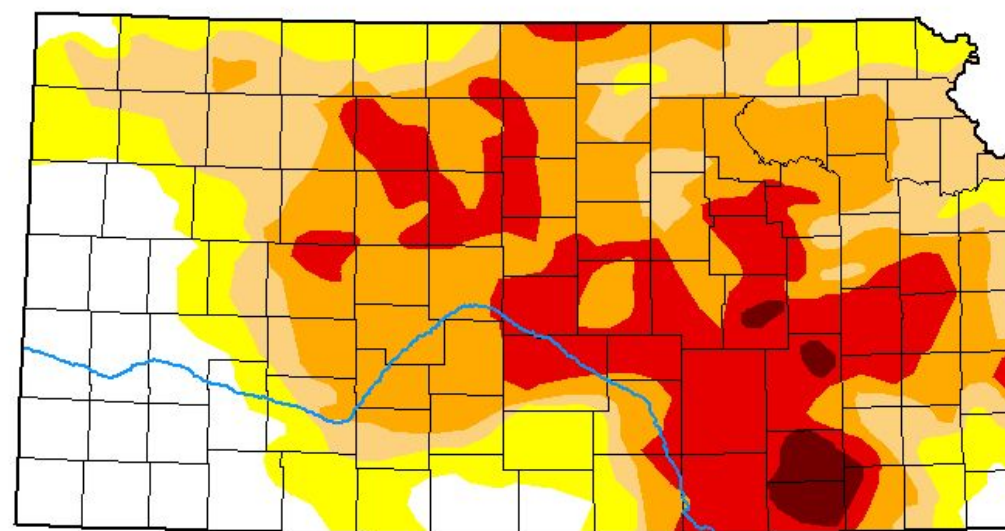
D2 Severe Drought includes large portions of central and eastern Kansas surrounding the D3 drought areas.

D1 Moderate Drought includes large portions of Kansas surrounding D2 drought areas.

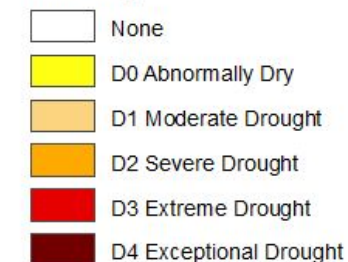
D0: Abnormally Dry includes large portions of Kansas surrounding D1 drought areas.

U.S. Drought Monitor Kansas

October 3, 2023
(Released Thursday, Oct. 5, 2023)
Valid 8 a.m. EDT



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <http://droughtmonitor.unl.edu/About.aspx>

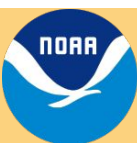
Author:

Brad Pugh
CPC/NOAA



droughtmonitor.unl.edu

Image Caption: Kansas [Drought Monitor](http://droughtmonitor.unl.edu) valid Oct 3, 2023



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Wichita, Kansas



Drought Intensity Definitions

D0	Abnormally Dry	<u>Going into drought:</u> <ul style="list-style-type: none">• Short-term dryness slowing planting, growth of crops or pastures	<u>Coming out of drought:</u> <ul style="list-style-type: none">• Some lingering water deficits• Pastures or crops not fully recovered
D1	Moderate Drought	<ul style="list-style-type: none">• Some damage to crops, pastures• Streams, reservoirs, or wells low, some water shortages developing or imminent• Voluntary water-use restrictions requested	
D2	Severe Drought	<ul style="list-style-type: none">• Crop or pasture losses likely• Water shortages common• Water restrictions imposed	
D3	Extreme Drought	<ul style="list-style-type: none">• Major crop/pasture losses• Widespread water shortages or restrictions	
D4	Exceptional Drought	<ul style="list-style-type: none">• Exceptional and widespread crop/pasture losses• Shortages of water in reservoirs, streams, and wells creating water emergencies	





Four Week Change in Drought Intensity - Kansas

Four Week Drought Monitor Class Change

- **Drought Worsened** 1-2 categories across generally the northeast quarter of KS, and 1 category over northwest KS.
- **No Change** in drought status was noted over large portions of KS.
- **Drought Improved** 1 category across portions of western, central, and eastern KS.

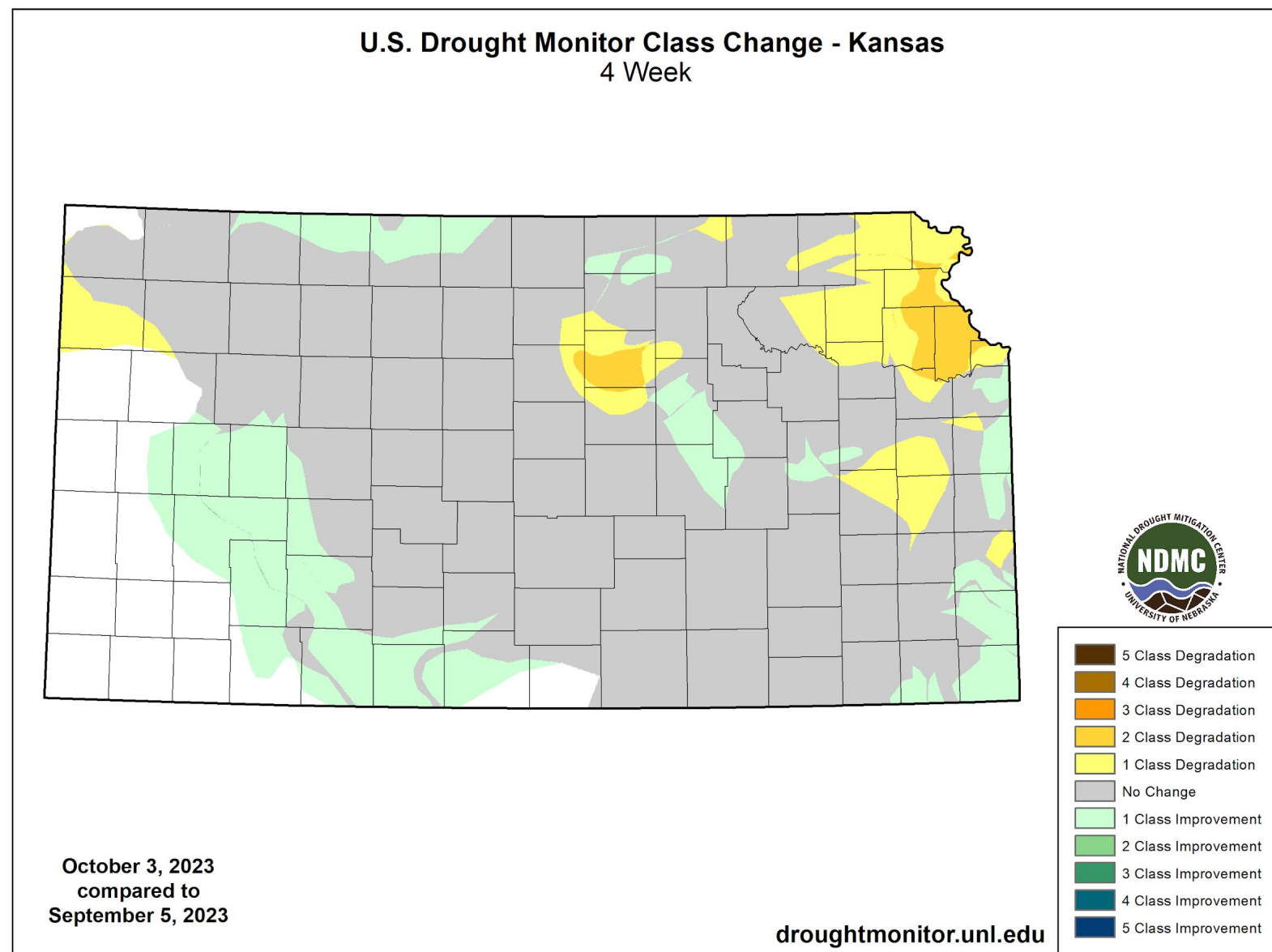
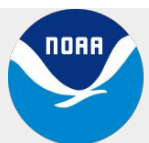


Image Caption: Kansas [Drought Monitor](https://droughtmonitor.unl.edu) 4-week change valid Oct 3, 2023.

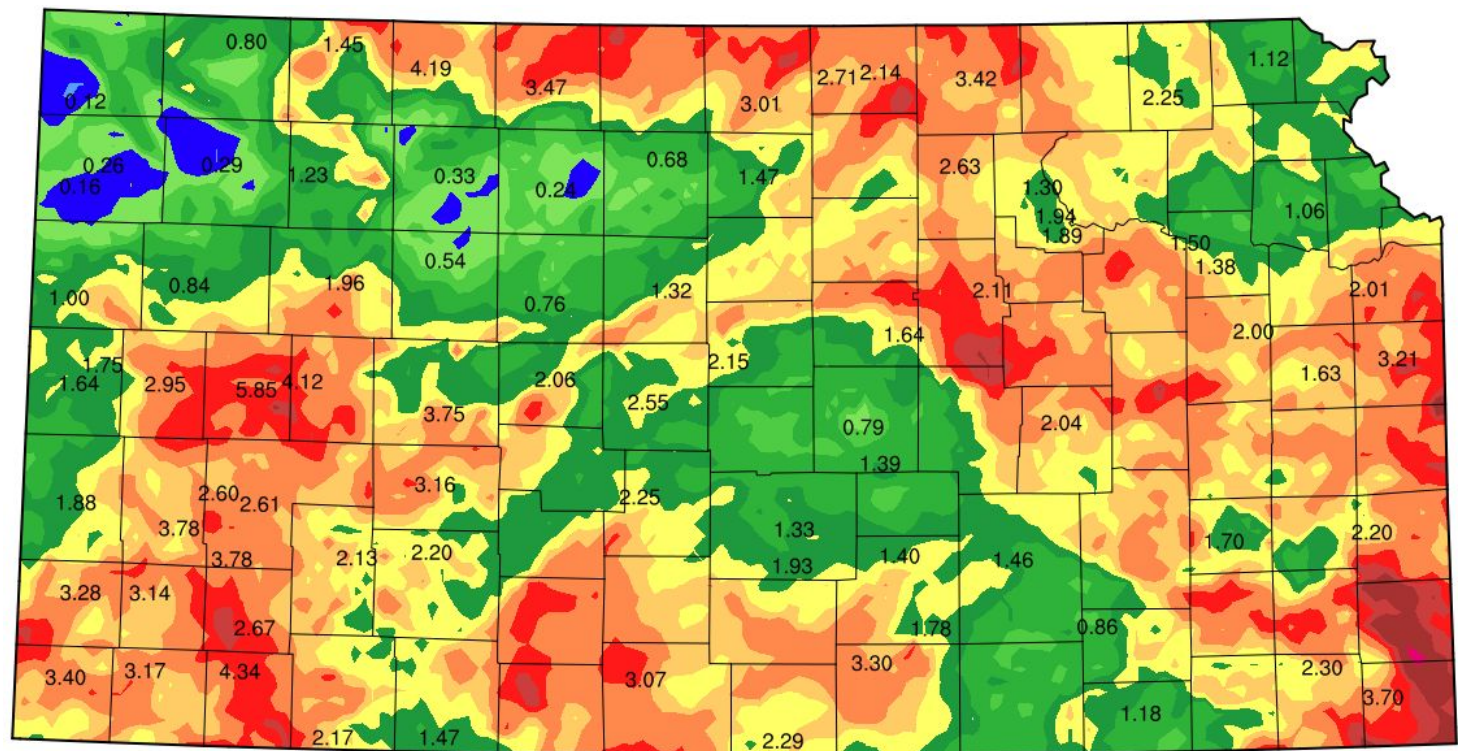




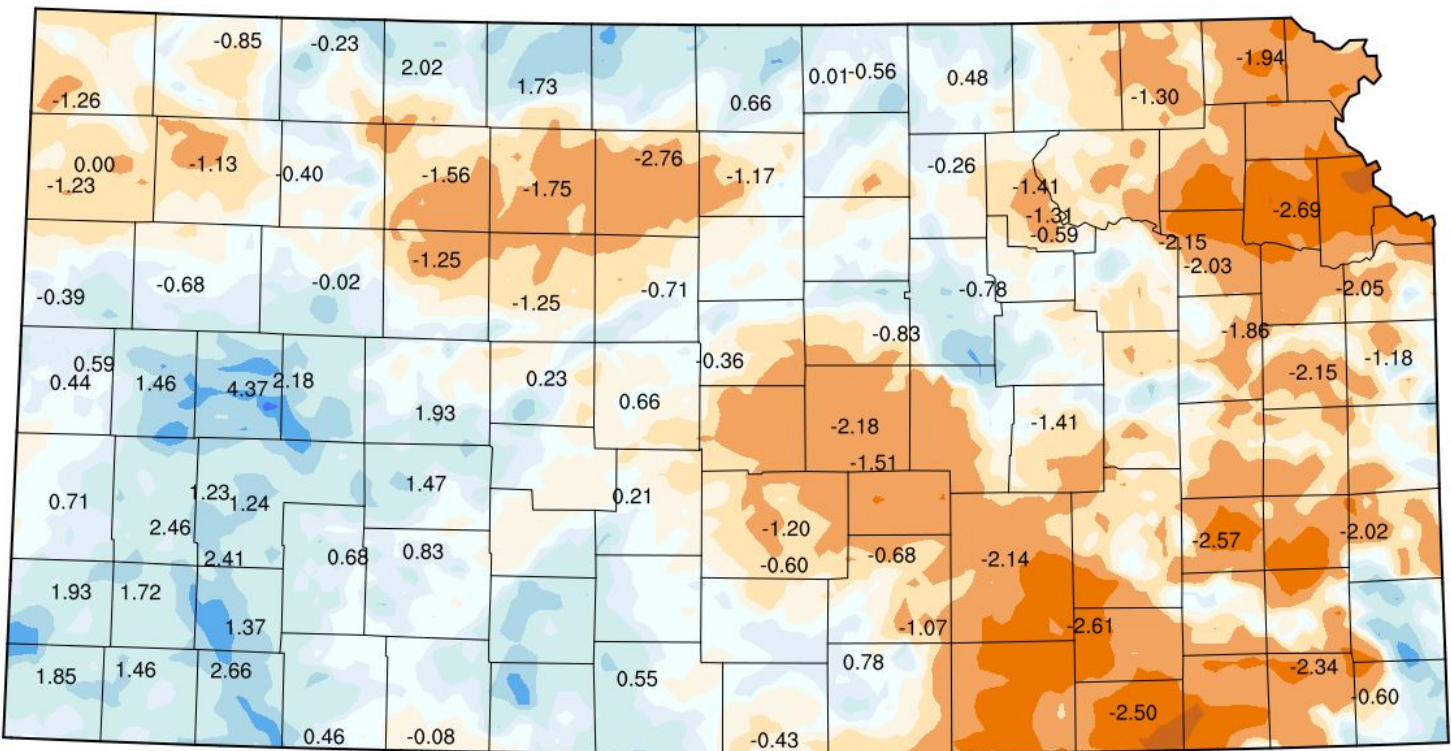
Precipitation - Past 30 Days (Through 10/7/2023)

Main Takeaways

- Large pockets of below average rainfall across much of central and eastern KS, and also northwest KS.
- Large pockets of near to above average rainfall across the rest of KS.



Kansas Mesonet - Observed 30days (in) at 2023-10-07 12:13 (CST)



Kansas Mesonet - departure 30days (in) at 2023-10-07 12:13 (CST)

Image Caption:
30-Day Precipitation for Kansas through 10/7/2023
Data courtesy of [KSU Kansas Mesonet](#)

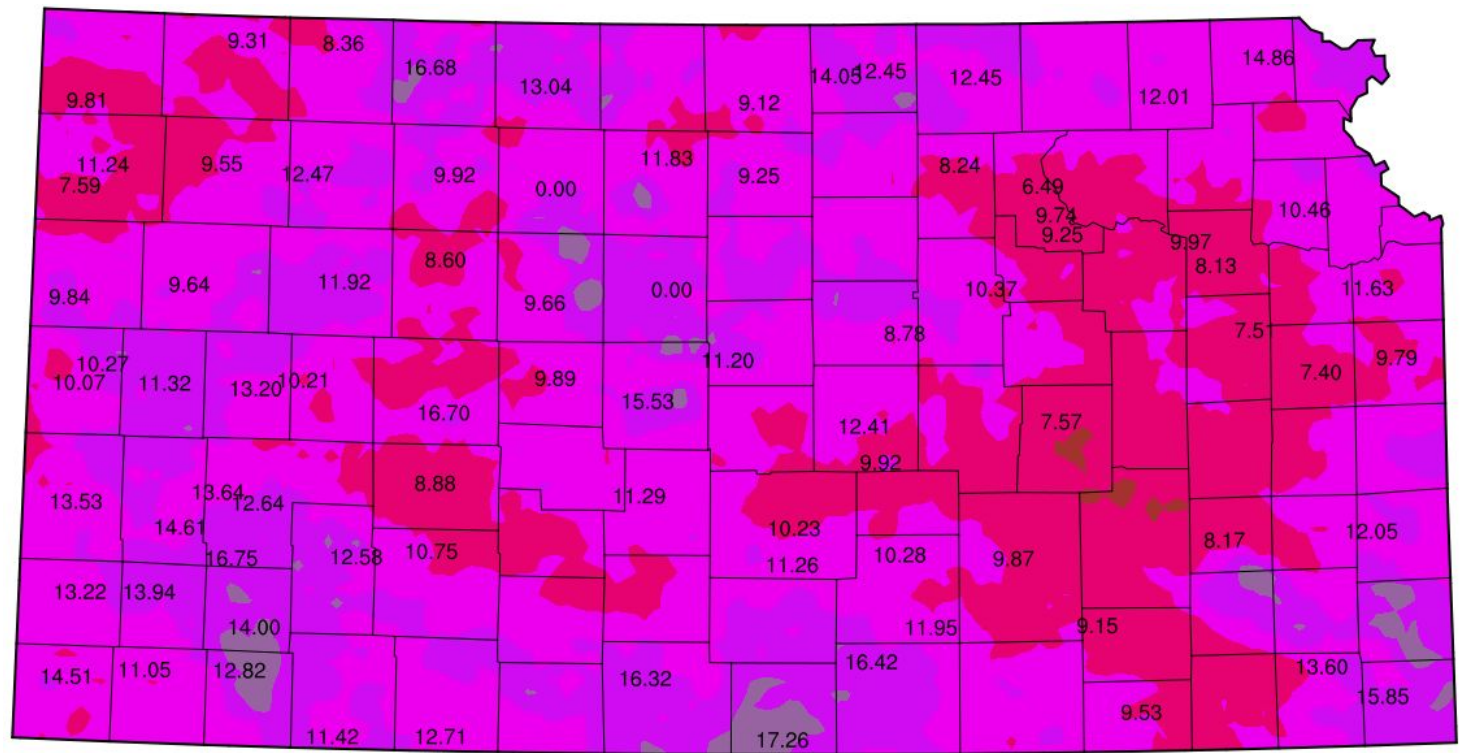
Image Caption:
30-Day Departure from Normal Precipitation for Kansas through 10/7/2023
Data courtesy of [KSU Kansas Mesonet](#)



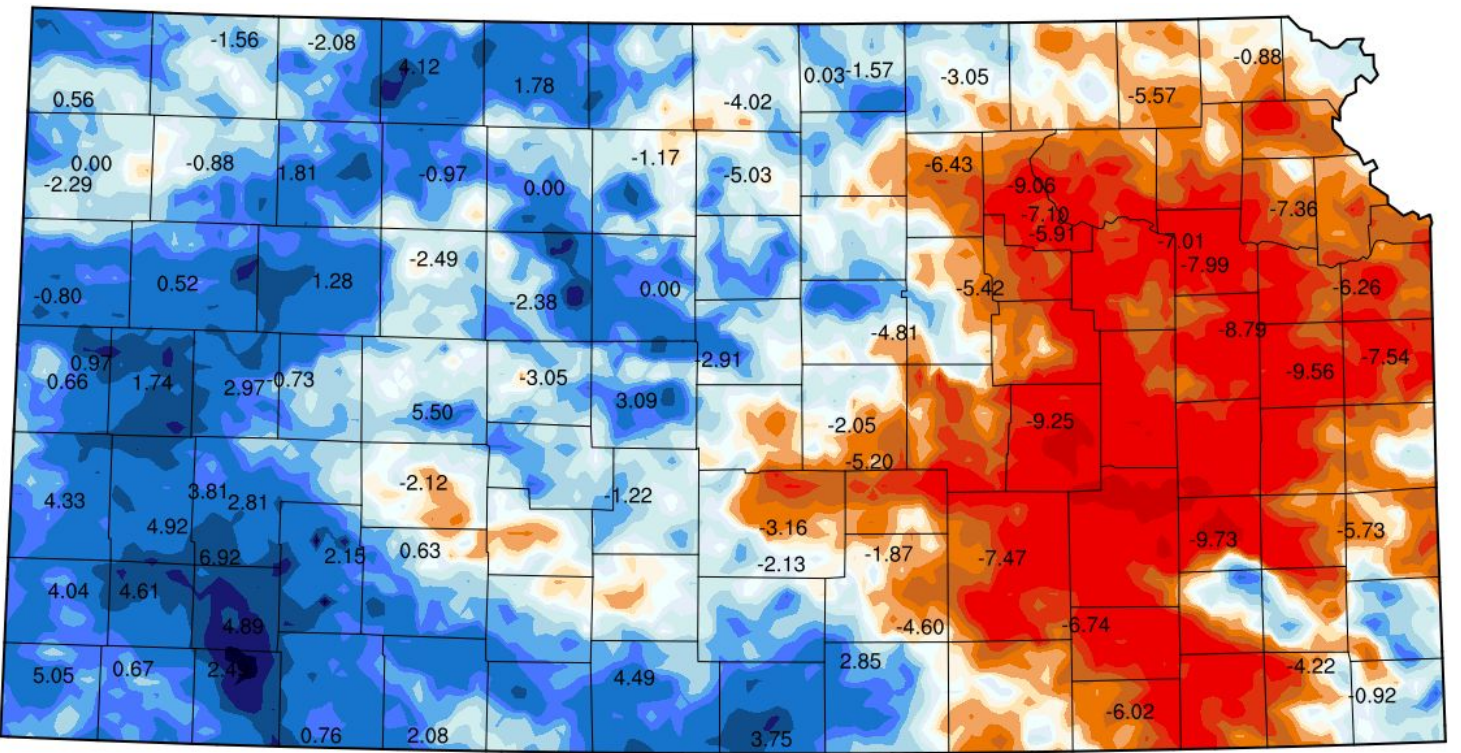
Precipitation - Past 120 Days (Through 10/7/2023)

Main Takeaways

- Much of eastern KS has seen below to well below average rainfall.
- Much of the western half of KS has seen above to well above average rainfall.



Kansas Mesonet - Observed 120days (in) at 2023-10-07 12:13 (CST)



Kansas Mesonet - departure 120days (in) at 2023-10-07 12:13 (CST)

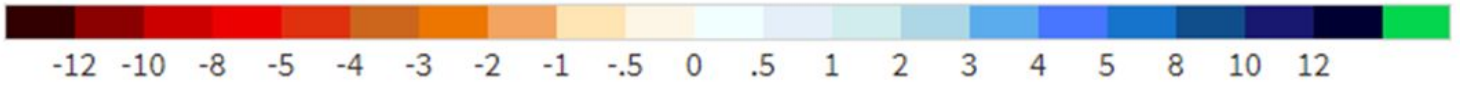


Image Caption:
120-Day Precipitation for Kansas through 10/7/2023
Data courtesy of [KSU Kansas Mesonet](#)

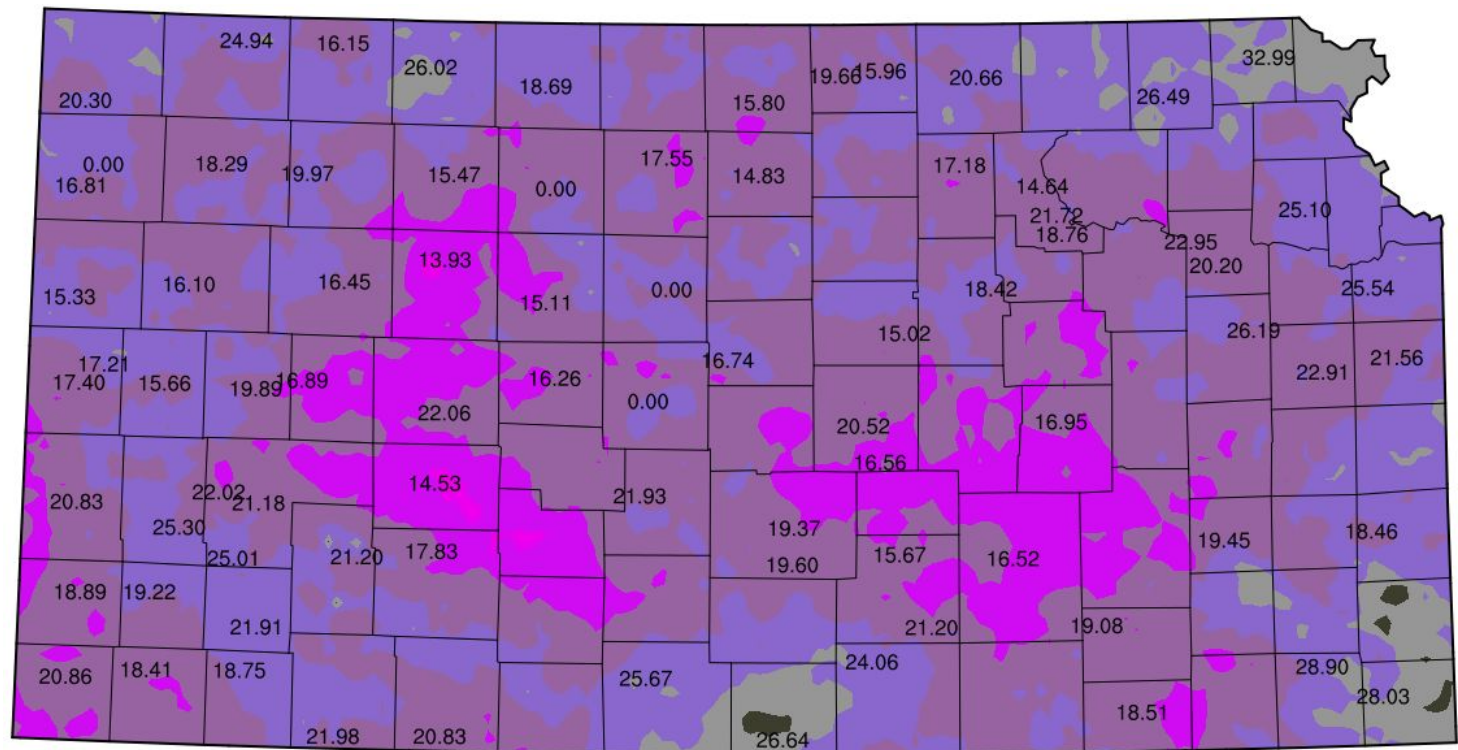
Image Caption:
120-Day Departure from Normal Precipitation for Kansas thru 10/7/2023
Data courtesy of [KSU Kansas Mesonet](#)



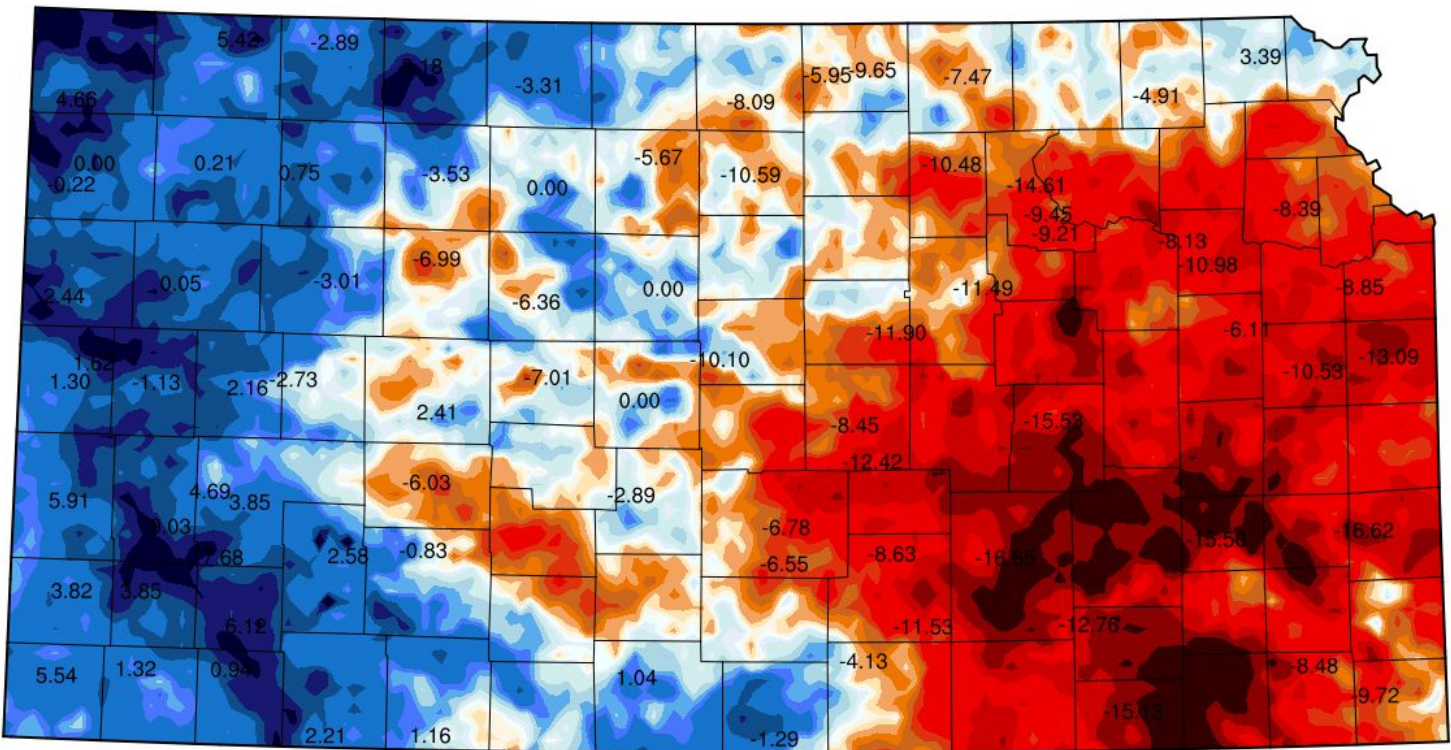
Precipitation - Year to Date (Through 10/7/2023)

Main Takeaways

- Much of the eastern half of KS has seen below to well below average rainfall.
- Much of western KS has seen above to well above average rainfall.



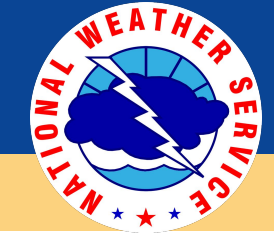
Kansas Mesonet - Observed ytd (in) at 2023-10-07 13:13 (CST)



Kansas Mesonet - departure ytd (in) at 2023-10-07 13:13 (CST)

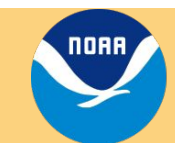
Image Caption:
Year-to-Date Precipitation for Kansas through 10/7/2023
Data courtesy of [KSU Kansas Mesonet](#)

Image Caption:
YTD Departure from Normal Precipitation for Kansas through 10/7/2023
Data courtesy of [KSU Kansas Mesonet](#)



Drought Impacts

- **National Drought Impacts September 2023 Report**
 - <https://storymaps.arcgis.com/stories/82bc4633970f47279533697b35685ec9>
- **Drought Impacts by State**
 - <https://droughtmonitor.unl.edu/DmData/StateImpacts.aspx>
- **Submit a Drought Impact Report**
 - <https://survey123.arcgis.com/share/850f937a1956425dab70cf3a79c64e8b?open=menu>



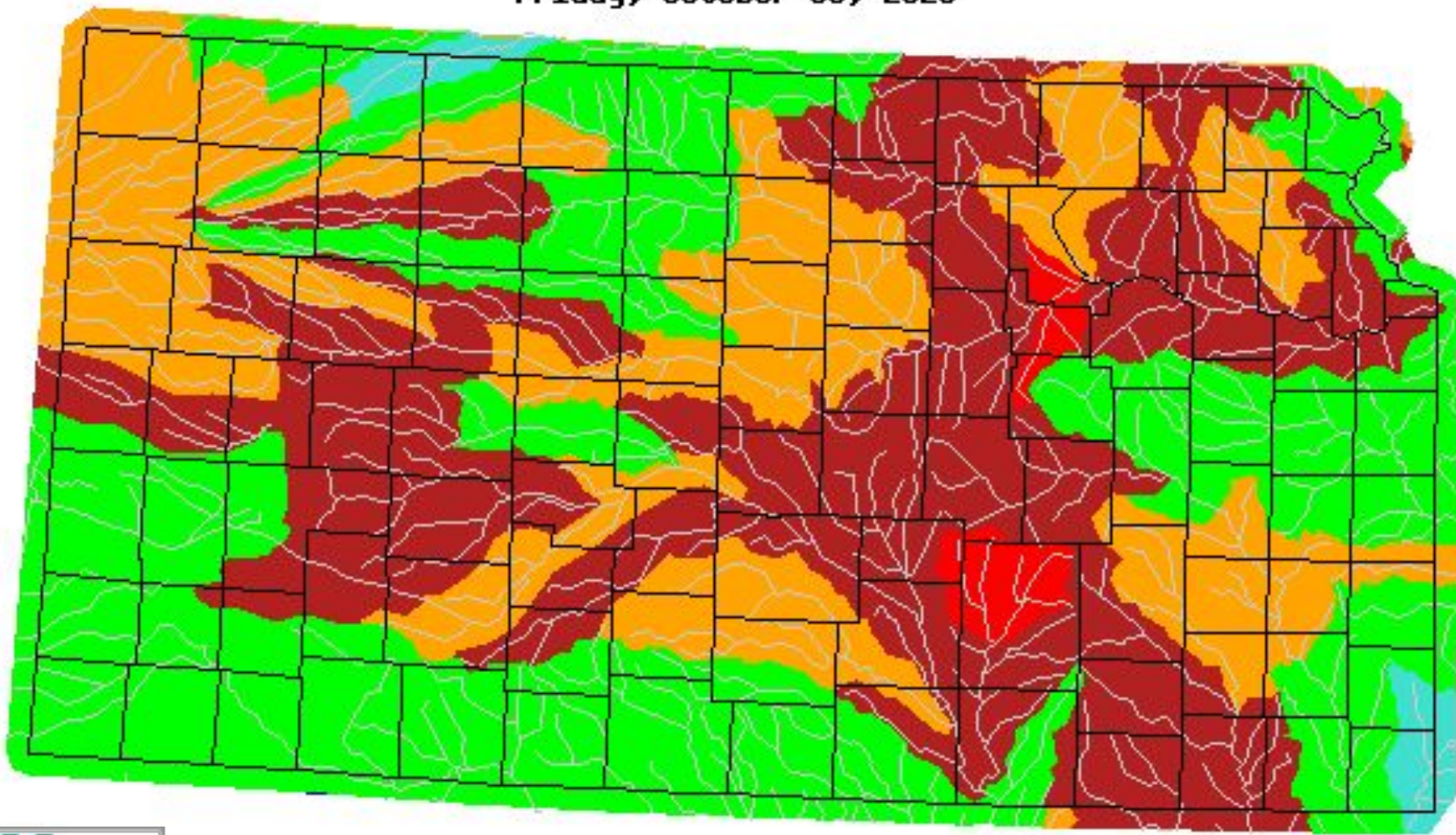


Hydrologic Conditions - Past 28 Day Streamflow (Thru 10/6/2023)

Main Takeaways

- Below to well below average streamflow was observed across large portions of KS.
- However, there were large pockets of near normal streamflow across the state, with small pockets of above normal streamflow over southeast and northwest KS.

Friday, October 06, 2023



Explanation - Percentile classes						USGS	
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Image Caption: [USGS](#) 28-day average streamflow HUC map valid 10/6/2023





Agricultural Impacts - Soil and Crop Moisture

Main Takeaway

- Below average soil moisture northeast half of KS, above normal southwest KS.
- Below average crop moisture north-central and northwest KS.

Calculated Soil Moisture Ranking Percentile
OCT 06, 2023

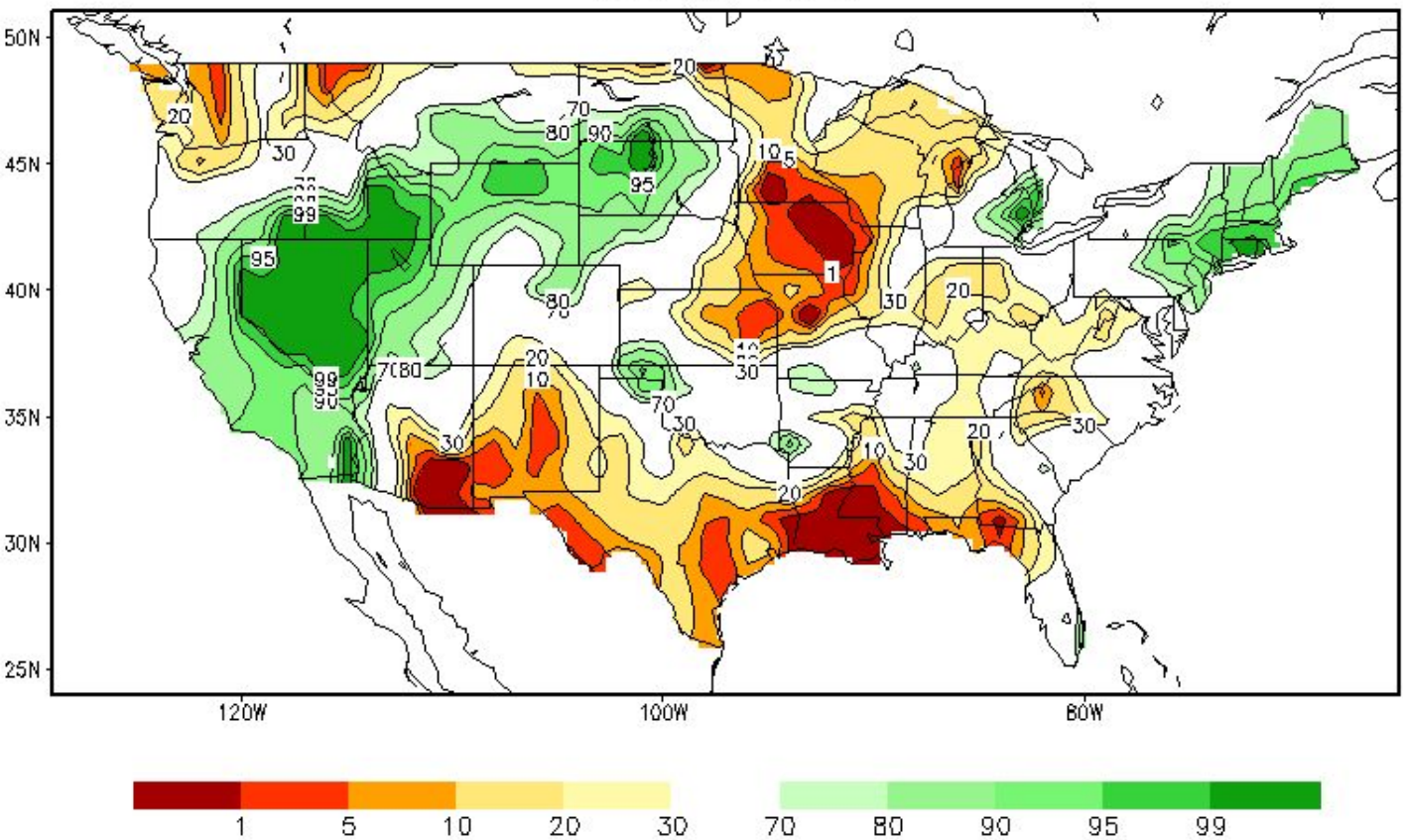


Image Caption:
[CPC](#) Calculated Soil Moisture Ranking Percentile valid 10/6/2023

Crop Moisture Index by Division
Weekly Value for Period Ending SEP 30, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

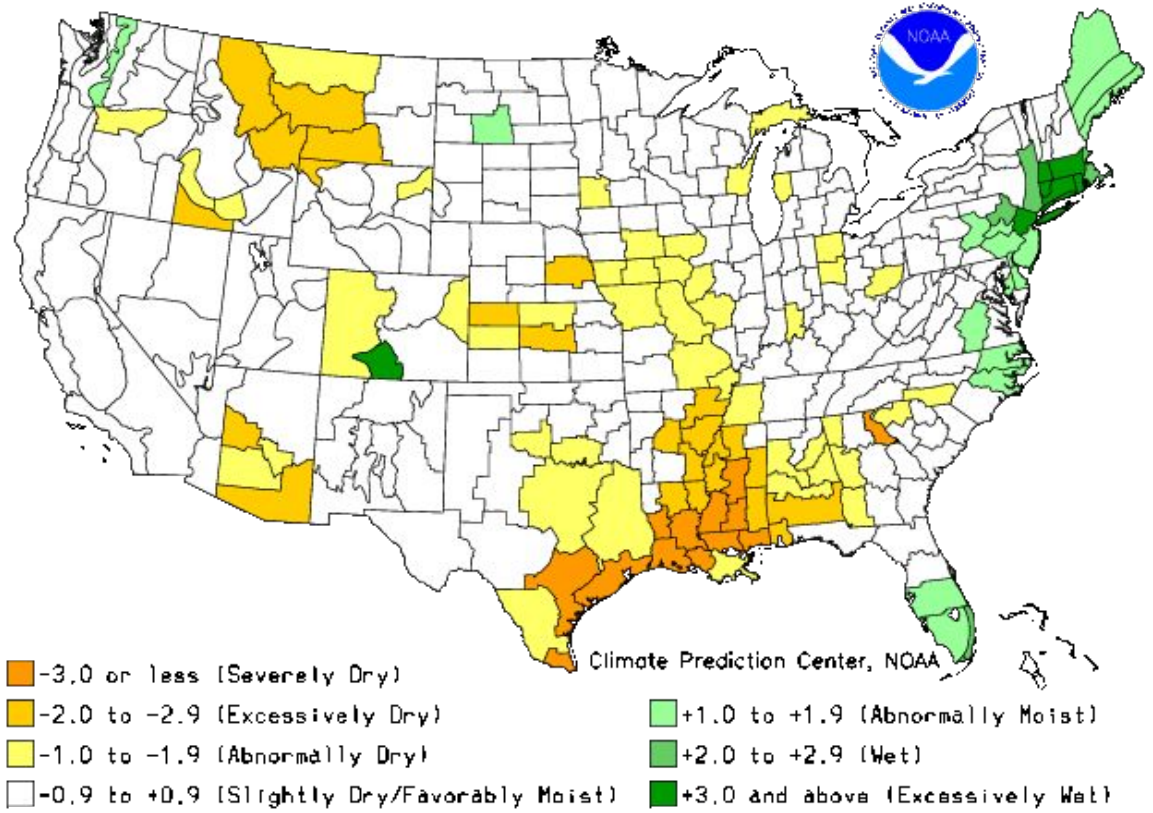


Image Caption:
[CPC](#) Crop Moisture Index by Division. Weekly value for period ending 9/30/2023



Agricultural Impacts - Crop Condition Reports

Agriculture and Crop Conditions Across Kansas Per the [USDA's Latest Weekly Report](#)

For the week ending October 2, 2023:

	Very Poor	Poor	Fair	Good	Excellent
Corn Condition	15%	18%	34%	26%	7%
Soybean Condition	20%	30%	32%	16%	2%
Sorghum Condition	11%	19%	38%	28%	4%
Cotton Condition	6%	17%	42%	31%	4%





Agriculture and Crop Conditions Across Kansas Per the [USDA's Latest Weekly Report](#)

For the week ending October 2, 2023:

	Very Poor	Poor	Fair	Good	Excellent
Pasture/Range Conditions	23%	28%	35%	13%	1%
	Very Short	Short	Adequate	Surplus	
Topsoil Moisture	33%	39%	28%	0%	
Subsoil Moisture	37%	39%	24%	0%	



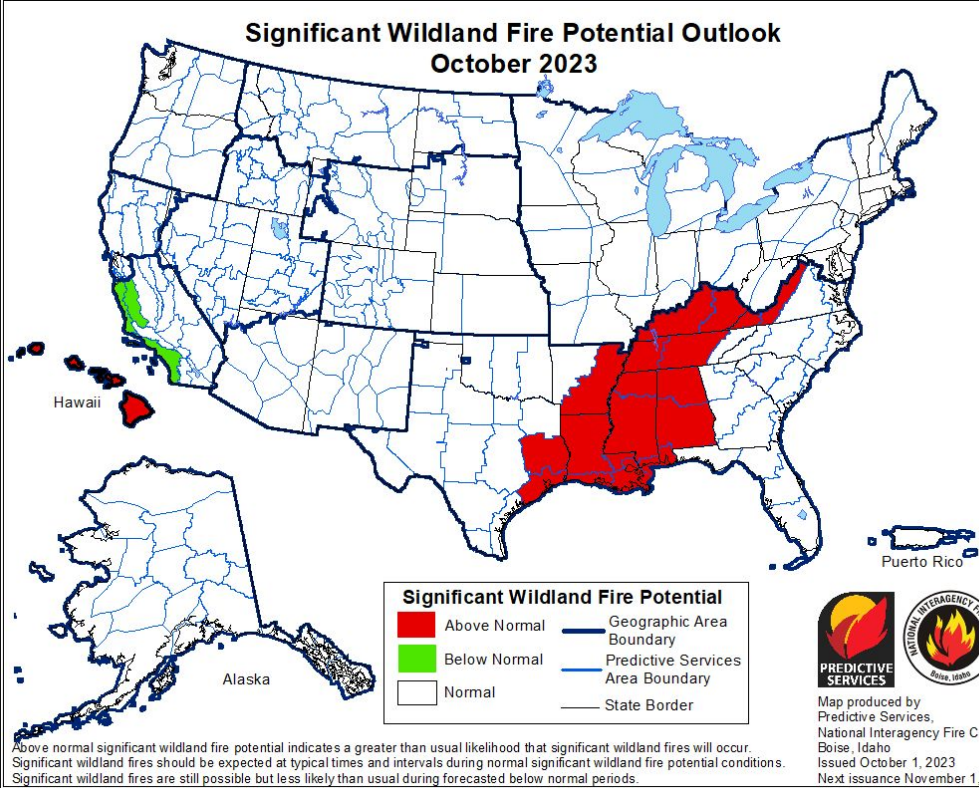


Significant Wildland Fire Potential Oct-Dec

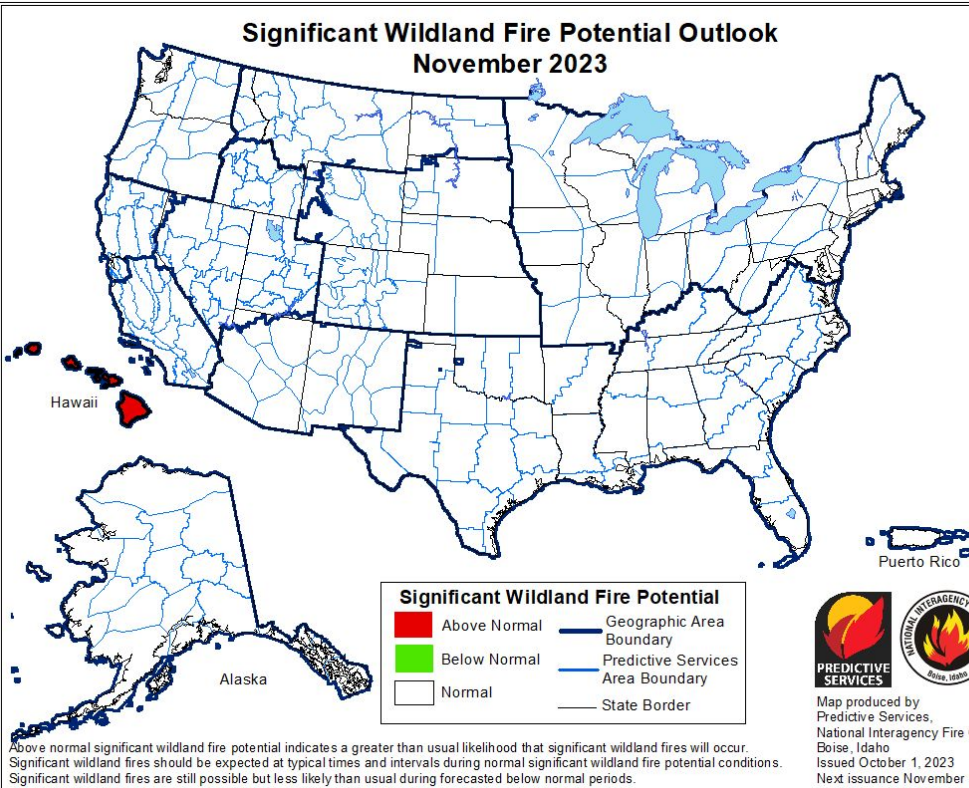
Main Takeaways

- The risk for significant wildland fires across Kansas is near normal October-December 2023.

October



November



December

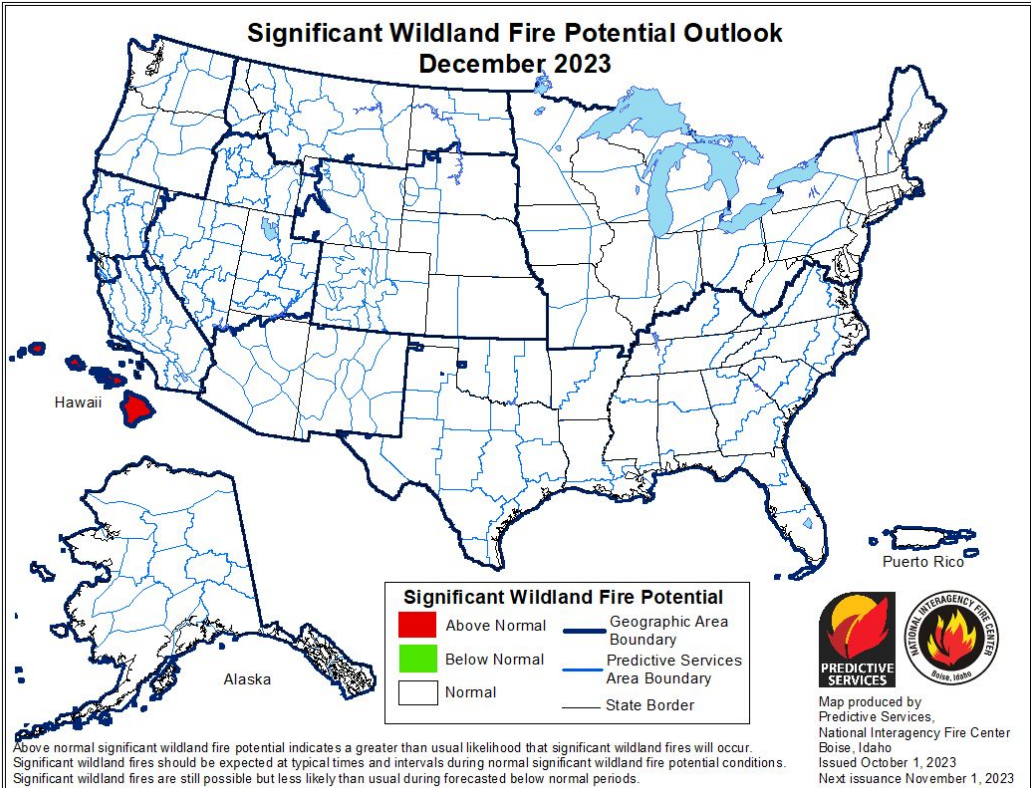
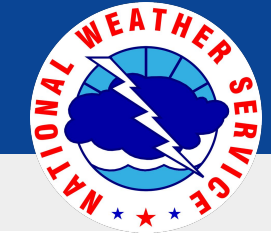


Image Captions: [Significant Wildland Fire Potential Monthly Outlook](#) for October-December 2023. Courtesy of [Predictive Services](#).





Seven Day Precipitation Forecast (Oct 8-15, 2023)

Next 7 days:

- Beneficial rainfall is forecast across northern and eastern portions of KS October 8-15.

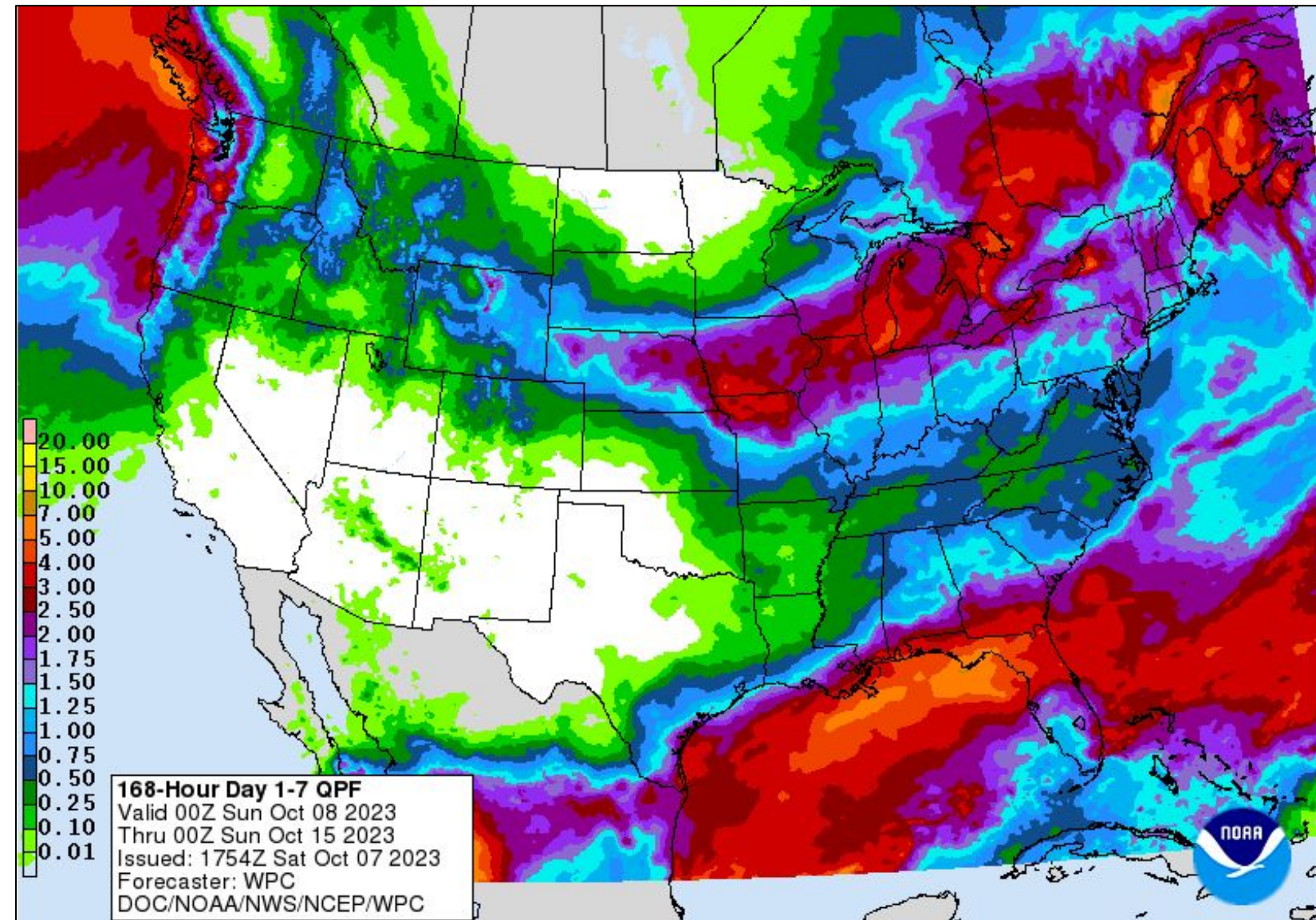


Image Caption: [Weather Prediction Center](#) 7-day precipitation forecast valid October 8-15, 2023.



October Outlook

Monthly Temperature and Precipitation Outlook

Main Takeaways

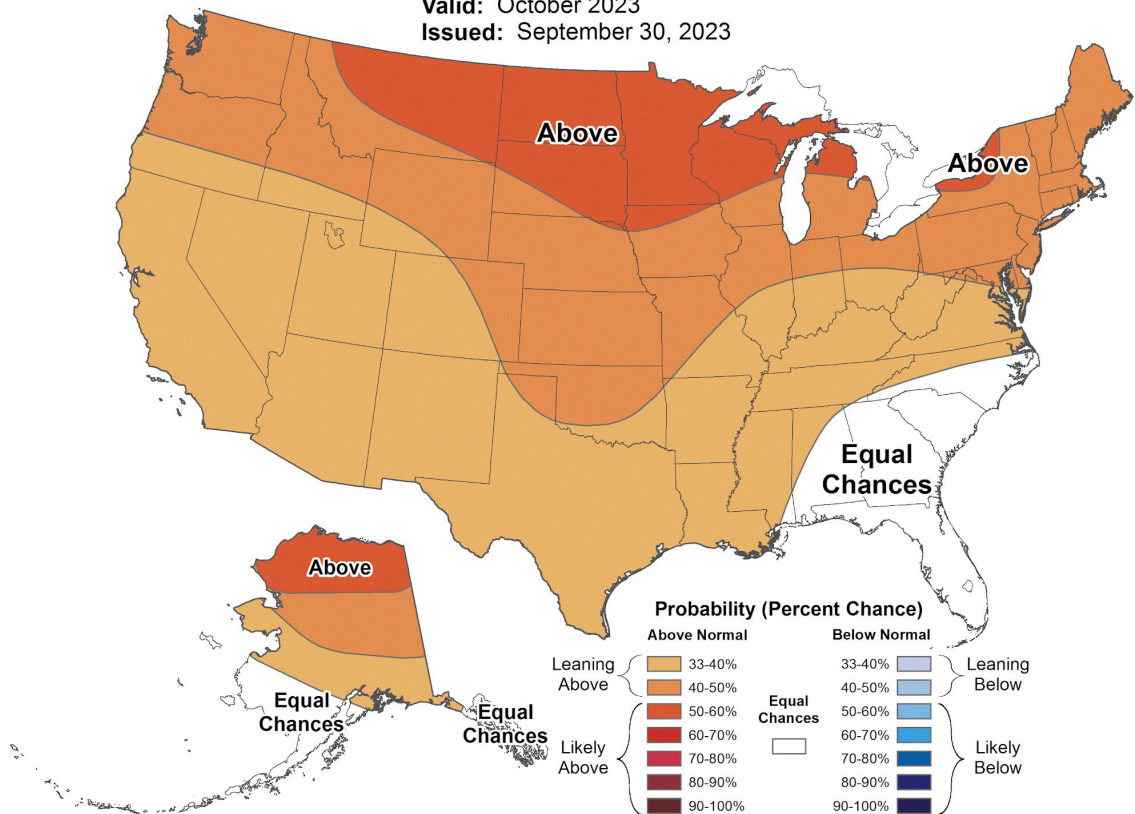
- There is a modest signal for above normal temperatures statewide, with a slight signal for above normal precipitation across the western half of KS.



Monthly Temperature Outlook



Valid: October 2023
Issued: September 30, 2023



Monthly Precipitation Outlook



Valid: October 2023
Issued: September 30, 2023

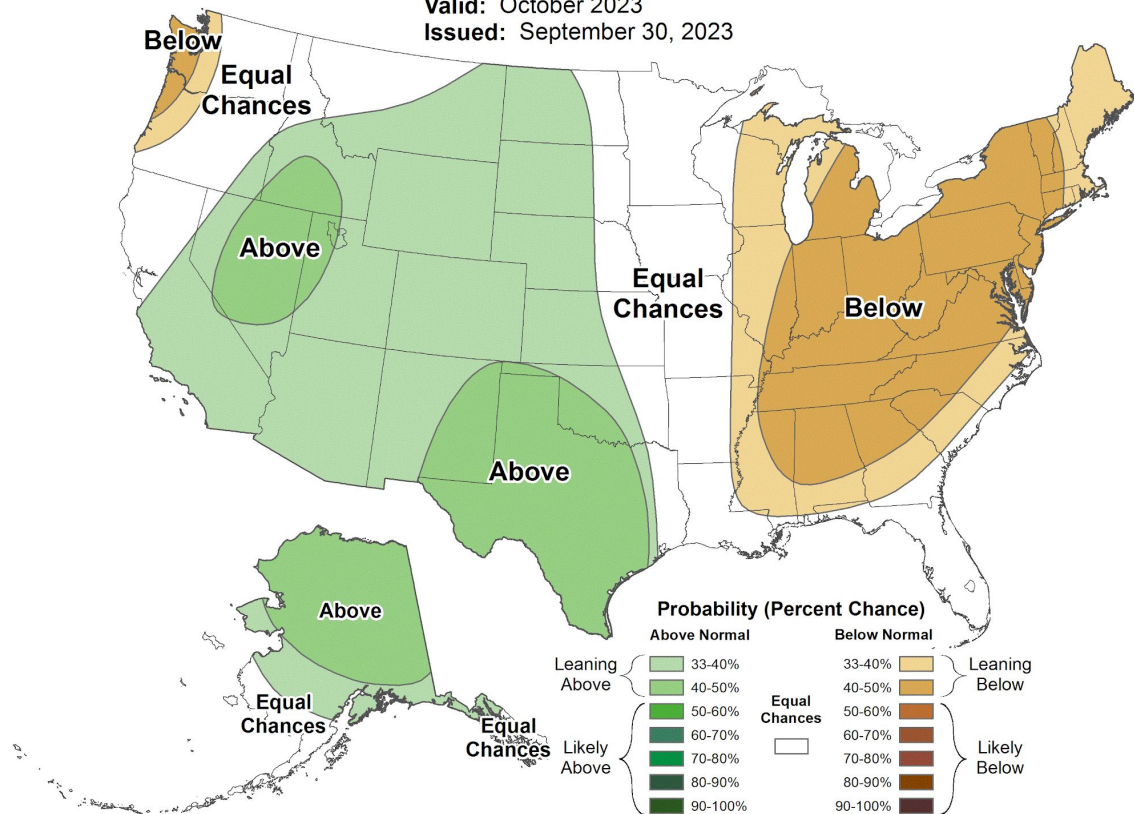


Image Caption: [Climate Prediction Center](#) Monthly Temperature Outlook.
Valid October 2023

Image Caption: [Climate Prediction Center](#) Monthly Precipitation Outlook.
Valid October 2023.





October–December Outlook

3-Month Temperature and Precipitation Outlook

Main Takeaways

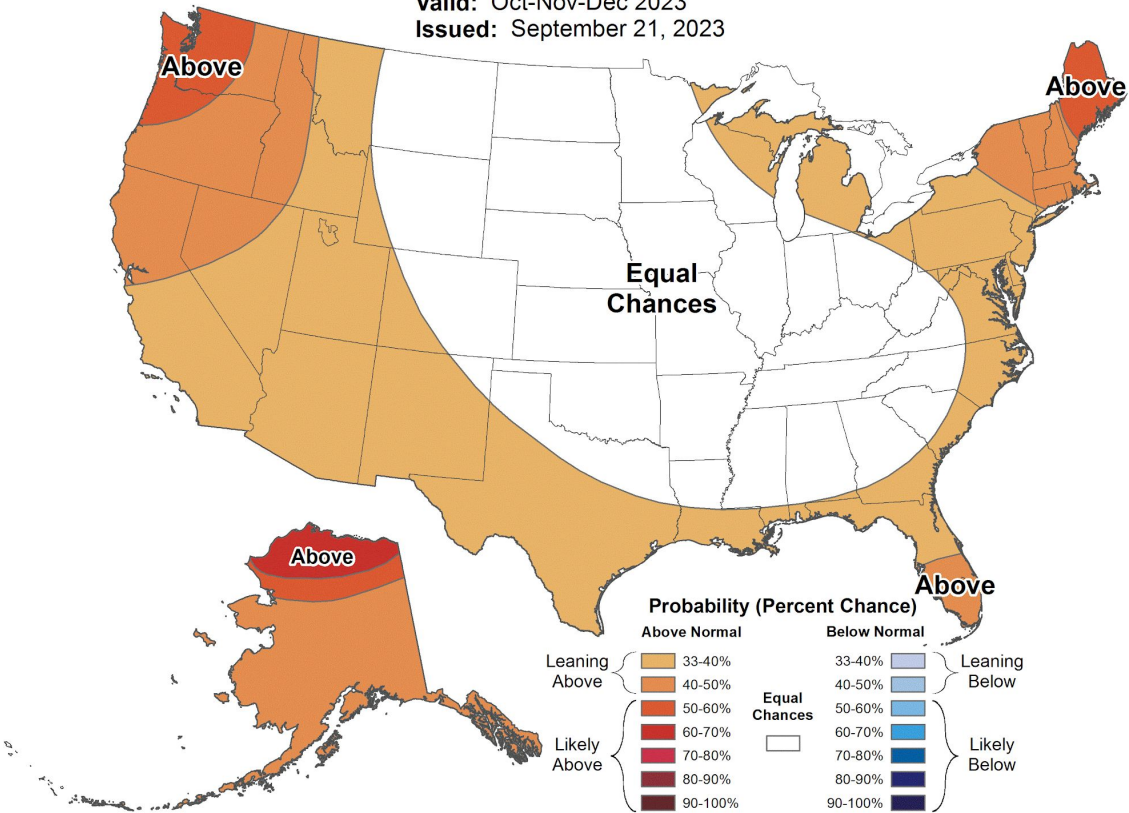
- There is no signal for above or below average temperatures across KS, with a slight signal for above average precipitation across far southern KS.



Seasonal Temperature Outlook



Valid: Oct-Nov-Dec 2023
Issued: September 21, 2023



Seasonal Precipitation Outlook



Valid: Oct-Nov-Dec 2023
Issued: September 21, 2023

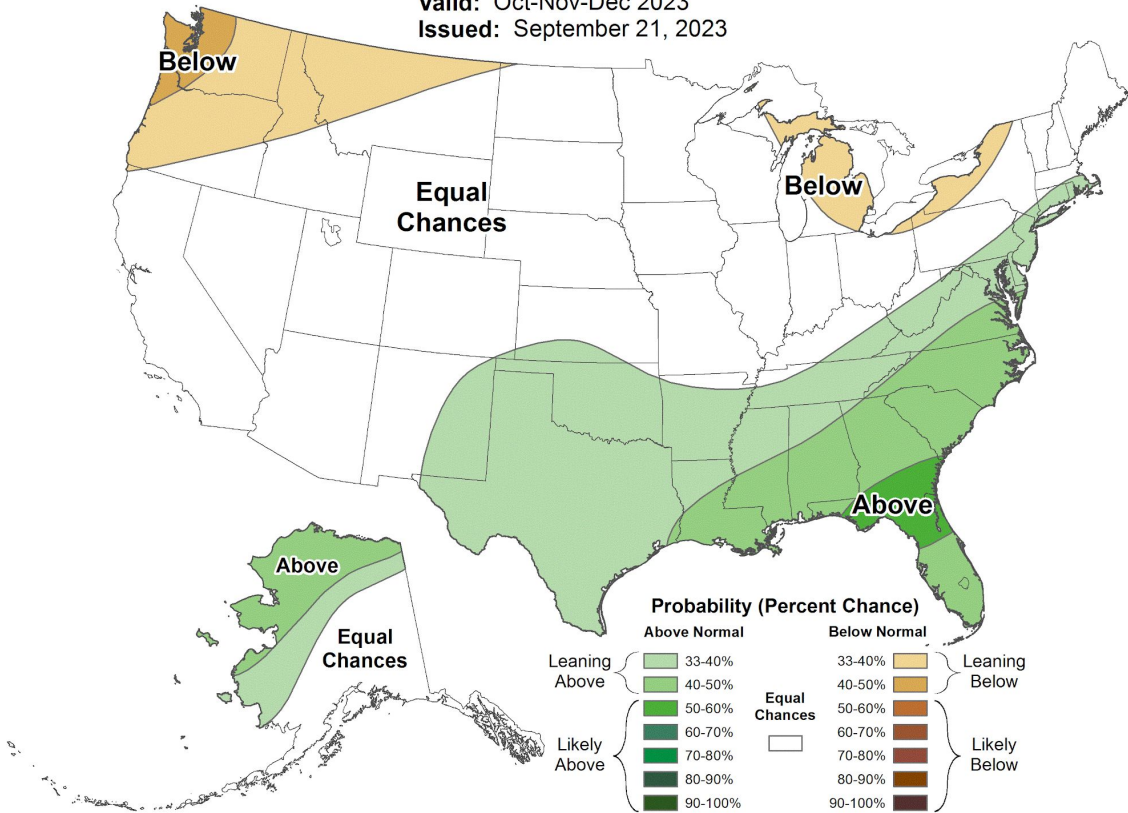
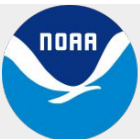


Image Caption: [Climate Prediction Center](#) Seasonal Temperature Outlook. Valid Oct-Dec 2023.

Image Caption: [Climate Prediction Center](#) Seasonal Precipitation Outlook. Valid Oct-Dec 2023.





Drought Outlook Through December

Drought Outlook through December 2023

- Some drought improvement is expected across large portions of central KS, with drought persistence expected over northeast KS through December 2023.

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for October 1 - December 31, 2023
Released September 30, 2023

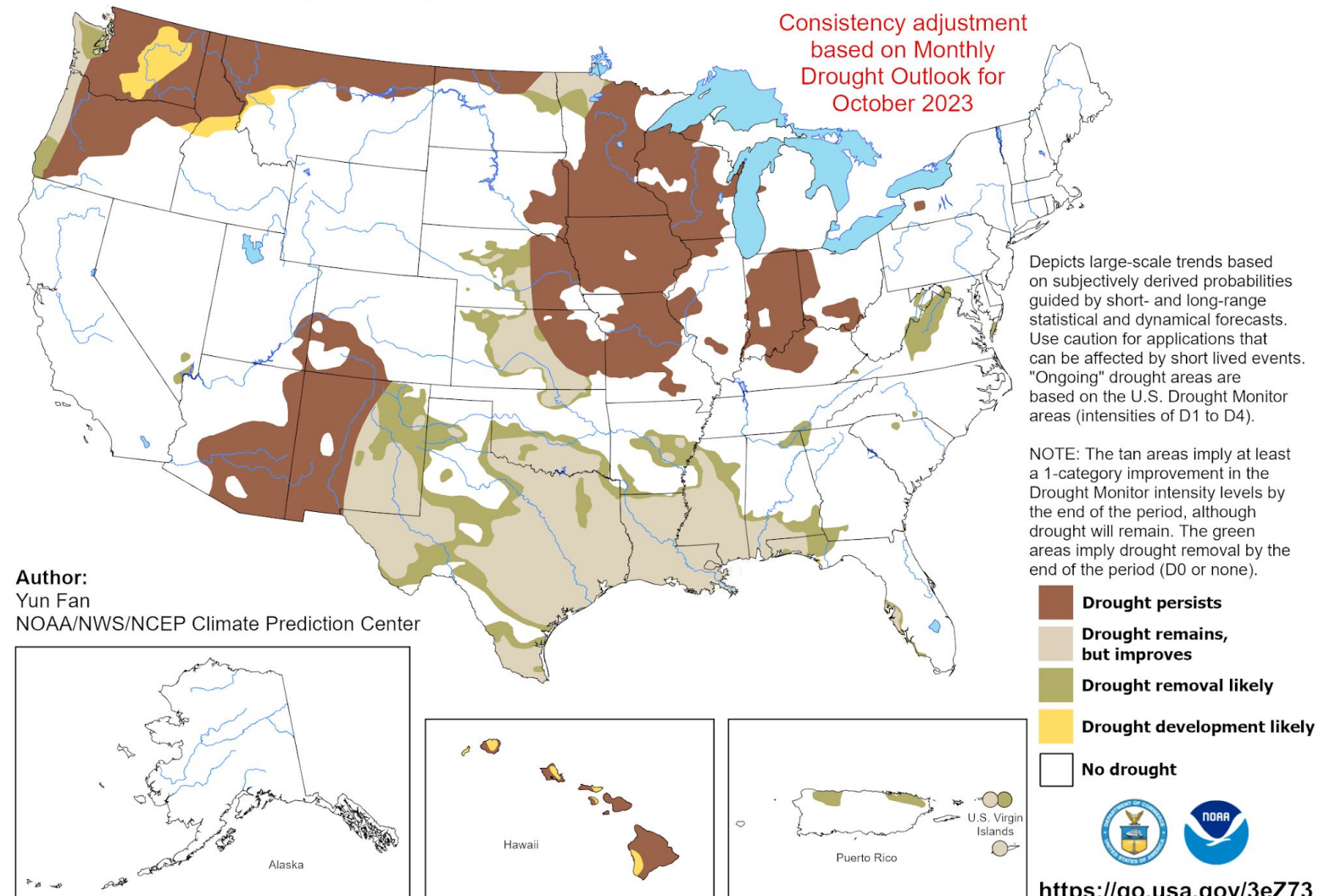


Image Caption: [Climate Prediction Center](https://go.usa.gov/3eZ73) Seasonal Drought Outlook valid through December 2023.

